

ABSTRACT OF THE DISCLOSURE

In tetrahedral interpolation suitable for data conversion implemented by digital computations, when the unit rectangular hexahedron is a regular hexahedron, no complicated multiplication is required, and the computation volume can be greatly reduced. However, when the unit rectangular hexahedron is not a regular hexahedron, since a complicated multiplication is required, the computation volume increases considerably. To avoid this, after the grid spacing is set (S1), X-u', Y-v', and Z-w' tables for obtaining the positions of an input value with respect to normalized grid points are prepared (S2 - S4). Subsequently, image data is input (S5), and u', v', and w' corresponding to the input image data are obtained using the prepared tables (S6). The relationship among u', v', and w' is determined (S7), and data-converted image data is calculated using an equation corresponding to the determination result (S8).